2003 Agricultural Land Reappraisal Report

Governor's 2002 Agricultural Advisory Committee On Land Valuation

6-20-2002

DEPARTMENT OF REVENUE
AGRICULTURAL LAND REAPPRAISAL REPORT
JUNE 2002

STATE OF MONTANA

JUDY MARTZ, GOVERNOR

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Montana State University- Department of Agricultural Economics and Economics
Montana Association of Counties
Montana Banker's Association
Montana Water Resources Association
Montana Farm Bureau
Montana Grain Grower's Association

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Executive Summary

Introduction

Each reappraisal cycle, the Governor is mandated by law to select an advisory committee to recommend new agricultural land values to the Department of Revenue. In May 2001, Governor Judy Martz appointed nine Montanans to evaluate and propose valuation schedules that will be implemented January 1, 2003 and remain in effect until December 31, 2008.

Committee members represent a cross-section of farm and ranch organizations, financial institutions, and local government. Every member is knowledgeable of different farm and ranch practices, farm policy and agricultural land values.

The committee reviewed all five agricultural land classifications. Each agricultural sector will see land valuation increases of between 14 and 16 percent from the previous appraisal cycle. These changes are due to increases in the market price for the base crops and private grazing leases used in the valuation process.

Agricultural taxpayers will see increases in land valuation that are phased-in incrementally over the six-year reappraisal cycle. The 2003 agricultural valuation schedules will not be fully implemented until 2008.

The five agricultural land classifications are:

- **Continuously cropped farmland**
- **Summer fallow farmland**
- **Continuously cropped hay land**
- **Irrigated land**
- **Grazing Land**

Committee Recommendations

In 2001, the legislature passed HB609. This bill allowed future agricultural advisory committees wider flexibility to recommend some methodology changes through administrative rule rather than requesting the changes directly through the legislature. The 2002 agricultural advisory committee chose to exercise this option in several areas as they made their final recommendations.

The committee recommended no methodology changes to continuously cropped farmland, summer fallow farmland, continuously cropped hay land and grazing land. However, the committee did recommend that the midpoint for the productivity range that represents continuously cropped hay land grade H1 change from 3.0 to 3.2 tons per acre.

The committee recommended six methodology changes in the valuation of irrigated land. Each recommendation is fully discussed in this report. The recommendations include:

1. elimination of irrigated rotations
2. increasing the base water cost from $5.50 to $10.00 per acre
3. changing the alternative minimum value for irrigated land from summer fallow land to 0.9 tons production of continuously cropped hay land
4. reducing the water cost categories from seven to five
5. eliminating the two lowest irrigated production grades
6. changing the midpoint for the production range that represents irrigated grade I-6 to 0.9 tons per acre.

Some taxpayers with irrigated land will see decreases in land valuation due to recommendations made by the committee. Any decrease in land valuation will be fully implemented in 2003 and these values will not change from 2004 through 2008.

The advisory committee recommended no change to the method in which the department collects energy cost information from taxpayers with irrigated land for the 2003 reappraisal cycle. However, the advisory committee recommended the creation of an interim committee that is composed of representatives from agricultural organizations in the state to study the irrigated land valuation system. The advisory committee recommends that the practice of collecting operator-specific energy costs from taxpayers with irrigated land should be eliminated and replaced with a more acceptable cost approach. The advisory committee also recommends that the interim committee study ways to implement a new irrigated land valuation system. Any proposal to eliminate the collection of operator-specific energy costs or modifying the irrigated land valuation system will require legislative action. Therefore, an interim committee will have make their recommendations to a future legislature.

The committee endorsed a change to administrative rule 42.20.147 - **Criteria For Agricultural Land Valuation**, that will further define agricultural eligibility for landowners who produce and raise livestock. The committee recommends that a landowner who produces and raises livestock must meet two key agricultural eligibility requirements. They are:

1. The land must produce and the taxpayer must market, not less than $1,500 in annual gross agricultural income.
2. The land's carrying capacity must support not less than 30 animal unit months per year (AUM's/year).

Historical Overview – Agricultural Land Valuation Changes

From 1978 to 1994, the overall per-acre taxable value of agricultural land remained remarkably steady. From 1978 to 1993, the average taxable value per acre was $2.75, with a high of $2.79 in 1993. The 1994 reappraisal significantly increased the assessed value of agricultural land. However, this increase was offset by a corresponding decrease in the taxable percentage rate applied to agricultural land.[1] The net result was that the average taxable value per acre remained at the $2.75 level. However, just because the taxable value

[1] See History of Agricultural Taxation on page 5.

has remained constant does not mean tax liability has remained constant. Since 1978, the average statewide mill levy has increased by 120 percent (from 204.24 to 450.10 mills). In that same timeframe, inflation increased 172 percent. That means that the $2.75 taxable value per acre in 1978 would be worth $7.47 in 2001.

From 1994 to the present time, the tax percentage rate for class three - agricultural land has been tied to the same tax rate applied to class four - residential, commercial and industrial property. Tying the class three taxable percentage rate to the class four taxable percentage has been beneficial for taxpayers with agricultural land.

For example, agricultural land valuation, with the exception of grazing land, remained relatively unchanged in the 1997 reappraisal cycle. Irrigated land assessments actually decreased slightly from the 1994 reappraisal cycle. In contrast, class four - residential, commercial and industrial property valuation increased by approximately 43 percent during the same time frame. A 1991 legislative change to 15-6-133 (2), MCA, mandated that the tax class three property must be taxed at the taxable percentage applicable to tax class four. This means that since 1991, the class three taxable percentage rate has been phased down at the same pace as the class four taxable percentage rate. In year 2000, the average per-acre taxable value for agricultural land was $2.66, which translates into the lowest per-acre taxable value in over 22 years.

If the 2003 legislature continues to tie the taxable percentage rate for agricultural land to the class four taxable percentage rate, taxpayers with agricultural land should continue to receive appropriate reductions in taxable value that are extended to residential, commercial and industrial property. If history repeats itself and the tax percentage rate for class four property changes, it would most likely decrease. This will translate into a further decrease in the average taxable value for agricultural land.

Table of Contents

Topic	Page

Recommended Agricultural Land Valuation Schedules
Effective January 1, 2003 To Be Phased-in By 2008

Non Irrigated Farmland Summer Fallow Basis

Grade	Bu. Wheat Per Acre	Assessed Value/Acre
1A8	40 +	$355.96
1A7	38 – 39	$338.38
1A6	36 – 37	$320.80
1A5	34 – 35	$303.22
1A4	32 – 33	$285.64
1A3	30 – 31	$268.07
1A2	28 – 29	$250.49
1A1	26 – 27	$232.91
1A	24 – 25	$215.33
1B	22 – 23	$197.75
2A	20 – 21	$180.18
2B	18 – 19	$162.60
2C	16 – 17	$145.02
3A	14 – 15	$127.44
3B	12 – 13	$109.86
4A	10 – 11	$ 92.29
4B	8 – 9	$ 74.71
5	< 8	$ 35.16

Non Irrigated Continuously Cropped Hay land

Grade	Tons of hay Per Acre	Assessed Value/Acre
1	3.0 +	$776.00
2	2.5 – 2.9	$654.75
3	2.0 – 2.4	$533.50
4	1.5 – 1.9	$412.25
5	1.0 – 1.4	$291.00
6	0.5 – 0.9	$169.75
7	<0.5	$ 60.63

Grazing Land

Grade	Acres Per Animal Unit	Animal Units Per Acres	Assessed Value/Acre
1A2	< .30	>3.33	$751.17
1A1	.30 – .50	3.33 – 2.00	$375.59
1A+	.51 – .59	1.96 – 1.69	$273.15
1A	.60 – 1.00	1.67 – 1.00	$187.79
1B	1.01 – 1.89	.99 – .53	$103.61
2A	1.90 – 2.19	.53 – .47	$ 75.12
2B	2.20 – 2.79	.45 – .36	$ 61.32
3	2.80 – 3.79	.36 – .26	$ 46.23
4	3.80 – 5.59	.26 – .18	$ 32.31
5	5.60 – 9.99	.18 – .10	$ 19.39
6	> 9.99	< 10	$ 12.02

Non Irrigated Farmland Continuously Cropped Basis

Grade	Bu. Wheat Per Acre	Assessed Value/Acre
1A4	44 +	$782.23
1A3	42 – 43	$747.07
1A2	40 – 41	$711.91
1A1	38 – 39	$676.76
1A	36 – 38	$641.60
1	34 – 35	$606.45
2	32 – 33	$571.29
3	30 – 31	$536.13
4	28 – 29	$500.98
5	26 – 27	$465.82
6	24 – 25	$430.66
7	22 – 23	$395.51
8	20 – 21	$360.35
9	18 – 19	$325.20
10	16 – 17	$290.04
11	14 – 15	$254.88
12	12– 13	$219.73
13	10 - 11	$184.57
14	< 10	$ 87.89

Tillable Irrigated Land

		Water Class				
		1	2	3	4	5
Grade	Tons of Alfalfa/Ac.	<$19.99 $17.50 mdpt	$20.00 – 24.99 $22.50 mdpt	$25.00 – 29.99 $25.50 mdpt	$30.00 – 34.99 $32.50 mdpt	$35.00 – 40.00 $37.50 mdpt
1A	4.5 +	$863.19	$788.19	$710.06	$631.94	$553.51
1B	4.0 – 4.4	$741.94	$666.92	$588.81	$510.69	$432.56
2	3.5 – 3.9	$620.69	$545.69	$467.56	$389.44	$311.31
3	3.0 – 3.4	$499.44	$424.44	$346.31	$268.19	$218.25
4	2.5 – 2.9	$378.19	$303.19	$225.06	$218.25	$218.25
5	2.0 – 2.4	$256.94	$218.25	$218.25	$218.25	$218.25
6	<2.0	$218.25	$218.25	$218.25	$218.25	$218.25

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2002 Agricultural Advisory Committee Recommendations To The Department Of Revenue

1. No change in the method of calculating the rolling base year average for commodity prices and grazing fees.

2. No change to the base crops used in the determination of gross income for continuously cropped farmland, summer fallow farmland, continuously cropped hay land and irrigated land.

3. No change to using the private grazing lease fees in the determination of gross income for grazing land.

4. No change in the source for collecting the commodity prices for the base crops and the grazing fees for private rangeland (Montana Agricultural Statistics Reporting Service).

5. No change to the landlord's crop share rental percentage, applied to the gross income for continuously cropped farmland (25 percent), summer fallow farmland (12.5 percent), continuously cropped hay land (25 percent) and irrigated land (25 percent) to produce net income.

6. No change to the 25 percent management fee applied to the gross income for grazing land to produce net income.

7. No change to the 20 percent reduction in the alfalfa commodity price due to the dairy influence on the reporting price collected by the Montana Agricultural Statistics Reporting Service.

8. No change in the 6.4 percent capitalization rate.

9. The inclusion of the agricultural market transition and the market loss assistance federal subsidies to the commodity price of "all wheat".

10. Elimination of irrigated rotations.

11. Change the midpoint for the productivity range that represents continuously cropped hay land grade H1 from 3.0 to 3.2 tons per acre.

12. Increase in the base water cost from $5.50 to $10.00 per acre.

13. Change the basis for the alternative minimum value for irrigated land from summer fallow wheat to 0.9 tons production of continuously cropped hay land.

14. Reduction from seven water cost categories to five water cost categories.

15. Consolidation of the two lowest irrigated grades (I-7 & I-8) into irrigated grade 6.

16. Change the midpoint for the productivity range that represents irrigated grade I-6 to 0.9 tons production per acre.

17. Organize an interim committee to study ways to eliminate the collection of operator-specific energy costs for taxpayers with irrigated land. The interim committee would also study ways to improve the irrigated land valuation system.

18. Change administrative rule 42.20.147 - **Criteria For Agricultural Land Valuation,** that defines agricultural eligibility for landowner's who produce and raise livestock.

Figure I

Recommended Agricultural Statewide Assessed Valuation
2003 Reappraisal Cycle

Agricultural Land Use	2002 Assessed Values	2003 Assessed Values	Percent Change	2004 Assessed Values	Percent Change	2005 Assessed Values	Percent Change
SF Farmland	$ 1,846,963,492	$ 1,893,413,128	2.51%	$ 1,939,862,764	2.45%	$ 1,986,312,400	2.39%
CC Farmland	$ 18,697,877	$ 19,168,114	2.51%	$ 19,638,350	2.45%	$ 20,108,586	2.39%
CC Hay Land	$ 192,877,560	$ 197,379,792	2.33%	$ 201,882,024	2.28%	$ 206,384,256	2.23%
Irrigated Land	$ 496,069,509	$ 502,347,531	1.27%	$ 515,303,170	2.58%	$ 528,258,717	2.51%
Grazing Land	$ 1,266,810,542	$ 1,300,630,371	2.67%	$ 1,334,450,200	2.60%	$ 1,368,270,029	2.53%
Statewide Total	**$ 3,821,418,979**	**$ 3,912,938,935**	**2.39%**	**$ 4,011,136,507**	**2.51%**	**$ 4,109,333,987**	**2.45%**

Agricultural Land Use	2006 Assessed Values	Percent Change	2007 Assessed Values	Percent Change	2008 Assessed Values	Percent Change	Overall Change
SF Farmland	$ 2,032,762,036	2.34%	$ 2,079,211,672	2.29%	$ 2,125,661,308	2.23%	15.09%
CC Farmland	$ 20,578,823	2.34%	$ 21,049,059	2.29%	$ 21,519,296	2.23%	15.09%
CC Hay Land	$ 210,886,488	2.18%	$ 215,388,720	2.13%	$ 219,890,952	2.09%	14.01%
Irrigated Land	$ 540,826,935	2.38%	$ 554,169,811	2.47%	$ 567,125,357	2.34%	14.32%
Grazing Land	$ 1,402,089,858	2.47%	$ 1,435,909,687	2.41%	$ 1,469,729,515	2.36%	16.02%
Statewide Total	**$ 4,207,144,139**	**2.38%**	**$ 4,305,728,948**	**2.34%**	**$ 4,403,926,429**	**2.28%**	**15.24%**

History Of Agricultural Land Taxation In Montana

As of July 1, 1973, the Department of Revenue was delegated the responsibility for classifying all agricultural lands. Previously, that was the duty of the county commissioners under Chapter 191, Laws of 1957. As with the previous law, the values determined by the department were to be based on the productive capacity of the land, i.e., the ability of the land to produce income from a cash crop (wheat, hay, forage for grazing, etc.).

Standardized agricultural land valuation schedules were developed in the early 1960s. The standardized values were based on a capitalization of net operating income (gross income less operating expenses). Data sources for income, expense and production information included the USDA Crop and Livestock Reporting Service, Montana Department of Agriculture Statistics, the ASCS, SCS, BIA, BLM and other government agencies.

The department updated and revised the agricultural land valuation schedules for the reappraisal cycle that concluded on December 31, 1985. Again, the primary source of the data was the various government agencies listed above. A concerted effort was made to include individual operations and agriculturally related associations to help refine the figures.

After developing the new valuation schedules, public comment was solicited through the administrative rules process. Agriculturists expressed their lack of support of the new valuation schedules because the new schedules would have increased the valuation of some types of agricultural land. To address their concerns, former Governor Ted Schwinden suspended the rules hearing process. Governor Schwinden directed the department to assemble an advisory committee to review the data and procedures and make changes if necessary.

The advisory committee had difficulty arriving at a consensus on the agricultural land valuation schedules. The 1985 Legislature froze the agricultural land valuation schedules that were in effect, specified the approach for developing future agricultural land valuation schedules and required the formation of an agricultural advisory committee.

In September 1990, the Department of Revenue Agricultural Advisory Committee was appointed. The committee reviewed, evaluated and recommended changes to the taxation of agricultural land. It presented its recommendations at public meetings held throughout the state. The recommendations of that committee were presented in legislation that was passed by the 1993 Legislature as Senate Bill 168. It required specific methodology, formula, and data sources in the calculation of the new agricultural land valuation schedules. While the appraised value of agricultural land increased significantly, the statewide impact of the new schedules was taxable value neutral. There were shifts in value, however, within the various classes of agricultural land (i.e. grazing, non-irrigated farm land, continuously cropped hay land, non-irrigated continuously cropped farm land, and tillable irrigated land). The tax rate for agricultural

land was reduced from 30 percent to 3.86 percent. That was the same rate used for residential and commercial property.

To mitigate the impact on agricultural taxpayers, the bill provided a phase-in of the change in taxable values over a four-year period. Both increases and decreases in value were phased-in.

Finally, Senate Bill 168 established another interim agricultural land advisory committee to review water costs and other issues applicable to the valuation and assessment of agricultural land. That committee was appointed in November 1993. It made recommendations to the Department of Revenue. Committee recommendations adopted by the 1995 Legislature in Senate Bill 198 included:

- allowing a base water cost of $ 5.50 per irrigated acre
- establishing an energy cost base year for irrigated land
- limiting allowable water costs to a maximum of $35 per acre of irrigated land
- continuing the phase-in of the taxable value of irrigated land

In May 1996, another agricultural land valuation advisory committee was appointed as required by law. The committee reaffirmed the specific methodology, formula and data source requirements in current law, updated those requirements using current data, and recommended new agricultural land valuation schedules to the Department.

In accordance with the provisions of SB184, passed by the 1999 Legislature, the new schedules were phased-in. For those agricultural land types that had a decrease in valuation, the decrease in the valuation was not phased-in but immediately implemented. For those agricultural land types that had an increase in valuation, the increase was phased in over a four-year period, beginning in 1999.

In April 2001, the legislature passed HB609, allowing future agricultural advisory committees more flexibility to recommend changes in agricultural valuation methodology through administrative rule, rather than requiring legislative approval. HB609 also increased the cap on water costs for irrigated land from $35 to $40.

In May 2001, Governor Judy Martz appointed nine members to an Agricultural Advisory Committee. The goal of this committee is to recommend land valuation schedules for the 2003 reappraisal cycle. The committee finalized new land valuation schedules in June 2002. The new land valuation schedules will be implemented on January 1, 2003 and remain in effect until December 31, 2008. The committee recommended no changes in methodology for continuously cropped farmland, summer fallow farmland, continuously cropped hay land and grazing land. The committee recommended several changes to irrigated land valuation that included:

- the elimination of rotations
- reduction of water cost categories from seven to five classes
- increase in the base cost from $5.50 to $10.00
- a single minimum irrigated valued that represents the assessed value for 0.9 ton of hay on continuously cropped hay land
- eliminating the two lowest grades of irrigated land and combining those grades with grade I-6.

All five agricultural land classifications will see a 14 to 16 percent increase in assessed valuation. This increase in land valuation can be attributed to market increases in the base crops used in the valuation process. Higher land values will be phased in over the length of the six-year appraisal cycle. Therefore, the full reappraisal values will not be implemented until 2008.

The Criteria For Classifying Property As Agricultural

1. Parcels of land 160 acres or more under one ownership are taxed as agricultural land. Agricultural land is taxed at 3.46% of its agricultural productive capacity value in 2002.

2. Parcels of land containing 20 acres or more but less than 160 acres under one ownership are taxed as agricultural land if the land is used primarily for raising and marketing agricultural products. The agricultural use test presumes that land is agricultural if $1,500 in annual gross income is produced and marketed from the land by the owner, owner's immediate family, agent, employee or lessee. Parcels of land containing 20 acres or more but less than 160 acres, that do not qualify under these criteria are considered non-qualified agricultural land. Non-qualified agricultural land is valued as Grade 3 grazing land. The taxable value of the non-qualifying taxable land is then computed by multiplying the assessed value by seven times the taxable percentage for agricultural land. The taxable percentage for nonqualified agricultural land is 24.22 percent in 2002.

3. Parcels of land less than 20 acres, under one ownership, are taxed as agricultural land if they produce and the owner markets $1,500 in annual gross income from the raising of livestock, poultry, field crops, fruit, and other animal or vegetable matter for food or fiber.

4. Land is not valued as agricultural if it is subdivided with stated restrictions prohibiting its use for agricultural purposes. The land may not be devoted to a residential, commercial or industrial purpose.

Valuation of Agricultural Land
Statutory Authority

1.	Productive value formula	15-7-201(4), MCA
2.	Seven-year Olympic average for commodity price data	15-7-201(5)(b)(i), MCA 15-7-201(5)(d), MCA
3.	Reporting source for base crops and grazing fees	15-7-201(5)(b)(i), MCA
4.	Base crop for irrigated land & continuously cropped hay land is alfalfa	15-7-201(4)(c), MCA
5.	Base crop for non-irrigated farmland is wheat	15-7-201(4)(c), MCA
6.	Base unit for grazing land is AUM's	15-7-201(4)(c), MCA
7.	20% reduction to alfalfa base crop due to the dairy influence	15-7-201(5)(c), MCA
8.	Determination of net income	15-7-201(5)(b)(ii), MCA
9.	Capitalization rate	15-7-201(4)(c), MCA
10.	Minimum irrigated land values	15-7-201(7)(f), MCA
11.	Base water cost for irrigated land	15-7-201(5)(b)(iii), MCA
12.	Allowable labor costs for irrigated land	15-7-201(5)(b)(iii)(A), MCA
13.	Allowable energy costs for irrigated land	15-7-201(5)(b)(iii)(B), MCA
14.	Energy cost base year and taxpayer reporting date	15-7-201(5)(B), MCA
15.	Maximum water cost	15-7-201(5)(b)(iii), MCA

15-7-201, MCA
Legislative Intent -- Value Of Agricultural Property.

15-7-201. Legislative intent -- value of agricultural property. (1) Because the market value of many agricultural properties is based upon speculative purchases that do not reflect the productive capability of agricultural land, it is the legislative intent that bona fide agricultural properties be classified and assessed at a value that is exclusive of values attributed to urban influences or speculative purposes.

(2) Agricultural land must be classified according to its use, which classifications include but are not limited to irrigated use, nonirrigated use, and grazing use.

(3) Within each class, land must be subclassified by production categories. Production categories are determined from the productive capacity of the land based on yield.

(4) In computing the agricultural land valuation schedules to take effect on the date when each revaluation cycle takes effect pursuant to 15-7-111, the department of revenue shall determine the productive capacity value of all agricultural lands using the formula V = I/R where:

(a) V is the per-acre productive capacity value of agricultural land in each land use and production category;

(b) I is the per-acre net income of agricultural land in each land use and production category and is to be determined as provided in subsection (5); and

(c) R is the capitalization rate and, unless the advisory committee recommends a different rate and the department adopts the recommended capitalization rate by rule, is equal to 6.4%. This capitalization rate must remain in effect until the next revaluation cycle.

(5) (a) Net income must be determined separately in each land use based on production categories.

(b) Net income must be based on commodity price data, which may include grazing fees, crop and livestock share arrangements, cost of production data, and water cost data for the base period using the best available data.

(i) Commodity price data and cost of production data for the base period must be obtained from the Montana Agricultural Statistics, the Montana crop and livestock reporting service, and other sources of publicly available information if considered appropriate by the advisory committee.

(ii) Crop share and livestock share arrangements are based on typical agricultural business practices and average landowner costs.

(iii) Allowable water costs consist only of the per-acre labor costs, energy costs of irrigation, and, unless the advisory committee recommends otherwise and the department adopts the recommended cost by rule, a base water cost of $5.50 for each acre of irrigated land. Total allowable water costs may not exceed $40 for each acre of irrigated land. Labor and energy costs must be determined as follows:

(A) Labor costs are zero for pivot sprinkler irrigation systems; $4.50 an acre for tow lines, side roll, and lateral sprinkler irrigation systems; and $9 an acre for hand-moved and flood irrigation systems.

(B) Energy costs must be based on per-acre energy costs incurred in the energy cost base year, which is the calendar year immediately preceding the year specified by the department in 15-7-103(5). By July 1 of the year following the energy cost base year, an owner of irrigated land shall provide the department, on a form prescribed by the department, with energy costs incurred in that energy cost base year. In the event that no energy costs were incurred in the energy cost base year, the owner of irrigated land shall provide the department with energy costs from the most recent year available. The department shall adjust the most recent year's energy costs to reflect costs in the energy cost base year.

(c) The base crop for valuation of irrigated land is alfalfa hay, adjusted to 80% of sales price, and the base crop for valuation of nonirrigated land is wheat. The base unit for valuation of grazing lands is animal unit months (AUM), defined as the average monthly requirement of pasture forage to support a 1,000-pound cow with a calf or its equivalent.

(d) Unless the advisory committee recommends a different base period and the department adopts the recommended base period by rule, the base period used to determine net income must be the most recent 7 years for which data is available prior to the date the revaluation cycle ends. Unless the advisory committee recommends a different averaging method and the department adopts the recommended averaging method by rule, data referred to in subsection (5)(b) must be averaged, but the average must exclude the lowest and highest yearly data in the period.

(6) The department shall compile data and develop valuation manuals adopted by rule to implement the valuation method established by subsections (4) and (5).

(7) The governor shall appoint an advisory committee of persons knowledgeable in agriculture and agricultural economics. The advisory committee shall include one member of the Montana state university-Bozeman, college of agriculture, staff. The advisory committee shall:

(a) compile and review data required by subsections (4) and (5);

(b) recommend to the department any adjustments to data or to landowners' share percentages if required by changes in government agricultural programs, market conditions, or prevailing agricultural practices;

(c) recommend appropriate base periods and averaging methods to the department;

(d) evaluate the appropriateness of the capitalization rate and recommend a rate to the department;

(e) verify for each class of land that the income determined in subsection (5) reasonably approximates that which the average Montana farmer or rancher could have attained; and

(f) recommend agricultural land valuation schedules to the department. With respect to irrigated land, the recommended value of irrigated land may not be below the value that the land would have if it were not irrigated.

VALUATION FORMULA FOR AGRICULTURAL LAND

There is more than 50 million acres of privately owned agricultural land in Montana. Agricultural land is classified based on its agricultural use and graded based on its productive capability for that use. The statutory formula for determining productive capacity value is:

V = I/R

Where:

V = value of each type of agricultural land
I = net income of each type of agricultural land
R = capitalization rate

Example of Calculation:

Net Income Per Acre	= $50
Capitalization Rate	= 6.4%
Value	= $781.25/Acre ($50 ÷ 6.4% = $781.25)

Because a single set of agricultural commodity prices are used to represent income for a multi year appraisal cycle, a seven-year Olympic average is used to smooth price volatility. The seven-year Olympic average uses information from seven consecutive years, drops the highest and lowest figure, then averages the remaining five years. The 2002 agricultural advisory committee recommended no change to the use of a seven-year Olympic average.

Commodity prices for two base crops are used for continuously cropped and summer fallow farmland, continuously cropped hay land and irrigated land. Private grazing fees for one animal unit month (AUM) are used for grazing land. These commodity prices and the grazing fees are used to calculate the gross income. The source for these prices is the Montana Agricultural Statistics Reporting Service. The advisory committee recommended the continued use of both base crops and the private grazing fees. They also recommended the continued use of the Montana Agricultural Statistics Reporting Service. The basis for the unit price is as follows:

1. **all wheat**
   a. continuously cropped farmland
   b. summer fallow farmland

2. **alfalfa**
   a. irrigated land
   b. continuously cropped hay land

3. **private lease fee for AUM's**
   a. grazing land

Gross income is calculated by multiplying the unit price for the base crop by the quantity produced on an acre of land. This is accomplished by taking the midpoint for the production range of each productivity grade and applying it to the unit price of the base crop. For example, if the average price of alfalfa is $62.08 and the average hay production is 1.2 tons per acre, then the gross income per acre is $74.50 ($62.08 * 1.2 tons/ac.).

Net income per acre is calculated by deducting agricultural costs from the gross income. The net to gross returns for farmland can be measured by examining the rental value of land. Farmland can be rented under a crop share agreement where the landowner receives a certain percentage of the crop produced by the land's tenant. This measure of the return to the landlord represents the land's net income. For instance, a ¼ crop share rental agreement represents a 25 percent net of gross returns to the landlord. If the gross income is $74.50 per acre, a ¼ crop share yields a net income to the landlord of $18.63 ($74.50 * .25).

The advisory committee recommended no change to the current crop share rental percentages or the 25 percent management fee on grazing land. The crop share rental percentages are as follows:

Agricultural Land Classification	**Landlord's Crop Share Rental Percentage**
➢ Continuously cropped farmland	¼ (25 percent)
➢ Summer fallow farmland[2]	⅛ (12.5 percent)
➢ Continuously cropped hay land	¼ (25 percent)
➢ Irrigated land	¼ (25 percent)
➢ Grazing Land	25 percent management fee

The capitalization rate is a rate that turns an ongoing income stream into present value. The use of capitalization rates is an accepted appraisal practice to estimate the value of income producing properties. The rate used to capitalize net agricultural income should reflect the rent to value ratios of agricultural land. There is a range of rent to value ratios in Montana depending on the type of agricultural land. The 1991 agricultural advisory committee reviewed the range of rent to value ratios for agricultural land and recommended a capitalization rate of 6.4 percent. That recommendation was later enacted into state law. The current advisory committee recommended that the 6.4 percent capitalization rate remain unchanged for the 2003 reappraisal cycle.

[2] Summer fallow farmland crop share is ½ of the continuously cropped farmland crop share because summer fallow farmland only produces a crop every other year.

Seven Year Olympic Average
Agricultural Commodity Prices

By law, base crop commodity prices use an Olympic average based on the most recent seven years for which there is data, prior to the date the current reappraisal cycle ends. The figures for the highest and lowest year are eliminated, thus producing an arithmetic five-year average.

For the 2003 reappraisal cycle, the seven-year period for which data is collected is 1995 through 2001.

Table 1 of **Figure II** reflects the seven-year Olympic average commodity prices for both base crops ("all wheat" & alfalfa) and the private grazing fees. The shaded years reflect the high or the low prices that are excluded from the five-year average price. The five-year average for alfalfa contains a 20 percent reduction to the alfalfa commodity price due to the dairy impact on the reporting prices collected by the Montana Agricultural Statistics Reporting Service.

Table 2 of **Figure II** reflects the high and low years that are excluded from the five-year average.

Table 3 in **Figure II** reflects the "all wheat" commodity prices plus two federal farm subsidy programs – agricultural market transition and market loss assistance.

Table 4 in **Figure II** compares the base crop commodity prices and grazing lease fees used in the 1997 reappraisal cycle to the base crop commodity prices and grazing lease fees recommended for the 2003 reappraisal cycle.

Figure III reflects the "all wheat" commodity prices for the past several decades as reported by the Montana Agricultural Statistics Reporting Service.

Figure IV reflects the alfalfa commodity prices for the past two decades as reported by the Montana Agricultural Statistics Reporting Service.

Figure V reflects the private grazing fee rates for the past two decades as reported by the Montana Agricultural Statistics Reporting Service.

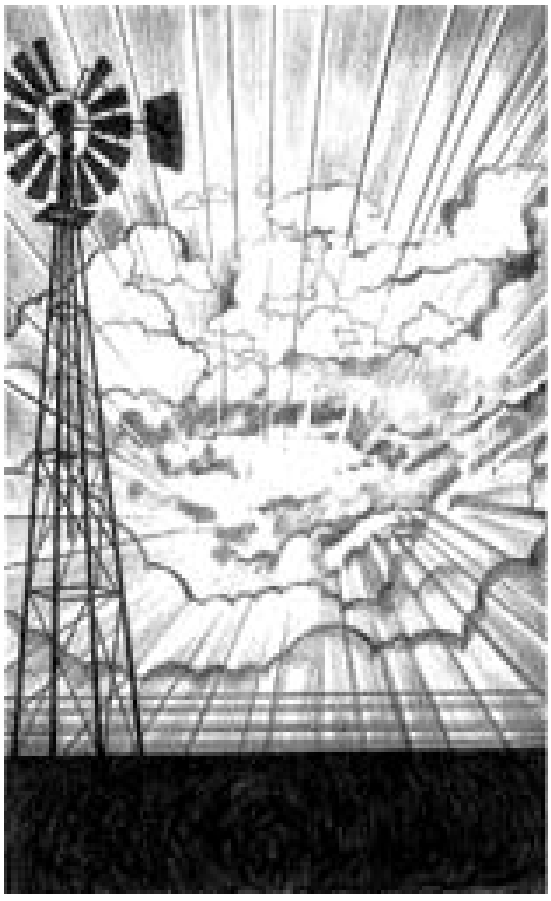


FIGURE II

Table 1
Seven Year Olympic Average
Agricultural Commodity Prices
1995 - 2001

Ag Commodity	Measurement	YEAR							Average Income
		1995	1996	1997	1998	1999	2000	2001	
Wheat	Per Bushel	$4.63	$5.03	$4.17	$4.02	$4.25	$4.48	$4.97	$4.50
Alfalfa	Per Ton	$67.50	$81.00	$80.00	$73.00	$66.00	$86.50	$92.50	$62.08
Grazing	Per AUM	$11.90	$11.80	$12.30	$12.60	$13.20	$14.10	$14.90	$12.82

* Wheat prices include government payments, see table 3
* The shaded commodity prices have been dropped from the 7-year Olympic average
*The 7-year Olympic average for alfalfa shown in the right-hand shaded column is adjusted by 20 percent to account for the price influence from the dairy industry

Table 2
High and Low Year Figures Dropped From Rolling Average

Wheat		Alfalfa		Grazing	
High	Low	High	Low	High	Low
1996	1998	2001	1999	2001	1996
$5.03	$4.02	$92.50	$66.00	$14.90	$11.80

Table 3
Government Wheat Subsidy Payments

Farm Payments	YEAR						
	1995	1996	1997	1998	1999	2000	2001
Commodity Price	4.63	4.24	3.62	3.03	2.93	3.02	3.30
AG Mkt Transition	0.00	0.79	0.55	0.66	0.66	0.70	0.78
Mkt Loss Assistance	0.00	0.00	0.00	0.33	0.66	0.76	0.89
Total	4.63	5.03	4.17	4.02	4.25	4.48	4.97

Table 4
Comparison Of Commodity Base Prices And Grazing Lease Fees
1997 Reappraisal Cycle Versus 2003 Reappraisal Cycle

Ag Commodity	Measurement	Year	
		1997	2003
Wheat	Per Bushel	$3.91	$4.50
Alfalfa	Per Ton	$54.46	$62.08
Grazing	Per AUM	$11.05	$12.82

Figure III

All Wheat, Alfalfa Hay & Private Grazing Fee Rates
Montana Agricultural Statistics Reporting Service
Average Prices And Fees Received
Revised March 2002

Year	All Wheat $/Bushel	Alfalfa Hay $/Ton	Private Grazing Fees $/AUM
2001	$ 3.30	$ 92.50	$ 14.90
2000	$ 3.02	$ 86.50	$ 14.10
1999	$ 2.93	$ 66.00	$ 13.20
1998	$ 3.03	$ 73.00	$ 12.60
1997	$ 3.62	$ 80.00	$ 12.30
1996	$ 4.24	$ 81.00	$ 11.80
1995	$ 4.63	$ 67.50	$ 11.90
1994	$ 3.54	$ 71.50	$ 11.80
1993	$ 3.50	$ 69.50	$ 11.40
1992	$ 3.42	$ 71.50	$ 11.86
1991	$ 3.17	$ 51.50	$ 10.58
1990	$ 2.65	$ 65.00	$ 9.61
1989	$ 3.66	$ 70.00	$ 9.61
1988	$ 3.98	-	$ 9.79
1987	$ 2.74	-	$ 7.94
1986	$ 2.52	-	$ 8.30
1985	$ 3.47	-	$ 8.80
1984	$ 3.56	-	$ 9.48
1983	$ 3.69	-	$ 9.23
1982	$ 3.55	-	$ 8.90
1981	$ 3.68	-	$ 9.40

Average Assessed Value, Average Production And Productivity Grade Year 2000 Data

Figure IV compares DOR average production and productivity values to data compiled by the Montana Agricultural Statistics Reporting Service. A direct comparison between DOR statistics and Montana Agricultural Statistics is not possible is some situations.

For example, Agricultural Statistics combines summer fallow and continuously cropped farmland into one category called "non-irrigated cropland". Therefore, it is difficult to compare the department's average summer fallow and continuously cropped values directly to the "non-irrigated cropland" value that is reported by the Montana Agricultural Statistics Reporting Service. Additionally, the Agricultural Statistics Reporting Service provides data on re-cropped farmland, but doesn't provide data on continuously cropped farmland.

The Agricultural Statistics Reporting Service provides the average production and market value for irrigated land that is comparable to the department's average figures for all three combined irrigation rotations.

The Agricultural Statistics Reporting Service doesn't compile average grazing productivity or a statewide market value for continuously cropped hay land.

Figure IV

Year 2000 Statistics

Agricultural Use	DOR Average Production	DOR Average Assessed Value	DOR Average Grade	Agricultural Statistics Average Production	Agricultural Statistics Average Market Value
SF Farmland	19.87 bu/ac	$151.71/ac	F2b	28.2 bu/ac	$360/ac
CC Farmland	29.43 bu/ac	$449.59/ac	CC4	No Data	$360/ac
Hay land	1.07 tons/ac	$227.42/ac	H5	0.9 tons/ac	No Data
Irrigated Land Minimum Rot.	2.42 tons/ac	$253.16/ac	I-5	see all rotations	see all rotations
Irrigated Land Medium Rot	2.94 tons/ac	$332.12/ac	I-4	see all rotations	see all rotations
Irrigated Land Maximum Rot	3.51 tons/ac	$499.99/ac	I-2	see all rotations	see all rotations
Irrigated Land All Rotations	2.66 tons/ac	$301.35/ac	I-4	3.1 tons/ac	$1,500/ac
Grazing Land	3.57 Ac./AUM	$36.57/ac	G3	No Data	$255/ac

Agricultural Land Valuation
Committee Recommendations

Summer Fallow & Continuously Cropped Farmland

The crop basis for summer fallow and continuously cropped farmland is the "all wheat" commodity price. The only area in Montana where continuously cropped farmland is the predominant farming practice is in Northwestern Montana. Generally, other portions of Montana don't receive adequate precipitation to support continuously cropped farmland. Land that is occasionally re-cropped two or three years in a row is classified as summer fallow farmland.

The 2002 agricultural advisory committee recommended that the current practice of using the landlord's ¼ crop share (25 percent of gross income) to represent net income on continuously cropped farmland continue for the 2003 reappraisal cycle. Because summer fallow land is typically farmed every other year, the net income is half that which is produced on continuously cropped farmland assuming the production levels are identical. Therefore, the net income is 12.5 percent of the gross income on summer fallow farmland.

Commodity prices for wheat have been declining in recent years. However, federal wheat subsidies have offset declines in commodity prices. The 2002 agricultural advisory committee looked at the different farm subsidy programs and recommended that two separate wheat subsidies be added to the "all wheat" commodity price. Those subsidies are the Agricultural Market Transition and Market Loss Assistance programs. The impact of these subsidies is shown in **Table 3** of **Figure II** on page 13.

The "all wheat" commodity price combined with the two farm subsidies produced an estimated 15.09 percent increase in valuation for the 2003 reappraisal cycle. **Figure V** shows the 2003 reappraisal impact by productivity grade for summer fallow and continuously cropped farmland.

Figure VI reflects the per-acre phase-in values for each year of the 2003 reappraisal cycle for continuously cropped and summer fallow farmland.

Figure V

Assessed & Taxable Value Comparison
1997 Versus 2003
Continuously Cropped & Summer Fallow Farmland

	SF Farmland				
	1997 Reappraisal Cycle		2003 Reappraisal Cycle		
PRODUCTIVITY GRADE	TOTAL APPRAISED VALUE	TOTAL TAXABLE VALUE	TOTAL APPRAISED VALUE	TOTAL TAXABLE VALUE	Percent Change
1A8	$ 799,251	$ 27,654	$ 919,854	$ 31,827	15.09%
1A7	$ 637,808	$ 22,068	$ 734,050	$ 25,398	15.09%
1A6	$ 1,182,136	$ 40,902	$ 1,360,515	$ 47,074	15.09%
1A5	$ 16,856,407	$ 583,232	$ 19,399,957	$ 671,238	15.09%
1A4	$ 13,350,793	$ 461,937	$ 15,365,363	$ 531,642	15.09%
1A3	$ 36,154,955	$ 1,250,961	$ 41,610,562	$ 1,439,725	15.09%
1A2	$ 78,766,335	$ 2,725,315	$ 90,651,793	$ 3,136,552	15.09%
1A1	$ 152,010,954	$ 5,259,579	$ 174,948,669	$ 6,053,224	15.09%
1A	$ 264,801,523	$ 9,162,133	$ 304,758,786	$ 10,544,654	15.09%
1B	$ 163,941,939	$ 5,672,391	$ 188,679,981	$ 6,528,327	15.09%
2A	$ 247,042,634	$ 8,547,675	$ 284,320,167	$ 9,837,478	15.09%
2B	$ 444,049,792	$ 15,364,123	$ 511,054,747	$ 17,682,494	15.09%
2C	$ 261,135,370	$ 9,035,284	$ 300,539,428	$ 10,398,664	15.09%
3A	$ 114,975,464	$ 3,978,151	$ 132,324,702	$ 4,578,435	15.09%
3B	$ 40,628,671	$ 1,405,752	$ 46,759,340	$ 1,617,873	15.09%
4A	$ 7,879,819	$ 272,642	$ 9,068,845	$ 313,782	15.09%
4B	$ 2,070,335	$ 71,634	$ 2,382,738	$ 82,443	15.09%
5	$ 679,306	$ 23,504	$ 781,810	$ 27,051	15.09%
TOTAL	$ 1,846,963,492	$ 63,904,937	$ 2,125,661,308	$ 73,547,881	15.09%

	CC Farmland				
	1997 Reappraisal Cycle		2003 Reappraisal Cycle		
PRODUCTIVITY GRADE	TOTAL APPRAISED VALUE	TOTAL TAXABLE VALUE	TOTAL APPRAISED VALUE	TOTAL TAXABLE VALUE	Percent Change
1A4	$ 2,807,706	$ 97,147	$ 3,231,376	$ 111,806	15.09%
1A3	$ 118,809	$ 4,111	$ 136,736	$ 4,731	15.09%
1A2	$ 623,108	$ 21,560	$ 717,132	$ 24,813	15.09%
1A1	$ 1,143,819	$ 39,576	$ 1,316,416	$ 45,548	15.09%
1A	$ 473,959	$ 16,399	$ 545,477	$ 18,874	15.09%
1	$ 457,182	$ 15,818	$ 526,168	$ 18,205	15.09%
2	$ 1,024,557	$ 35,450	$ 1,179,158	$ 40,799	15.09%
3	$ 2,851,145	$ 98,650	$ 3,281,369	$ 113,535	15.09%
4	$ 1,958,013	$ 67,747	$ 2,253,468	$ 77,970	15.09%
5	$ 2,306,729	$ 79,813	$ 2,654,803	$ 91,856	15.09%
6	$ 2,587,543	$ 89,529	$ 2,977,990	$ 103,038	15.09%
7	$ 1,398,222	$ 48,378	$ 1,609,207	$ 55,679	15.09%
8	$ 698,629	$ 24,173	$ 804,049	$ 27,820	15.09%
9	$ 99,116	$ 3,429	$ 114,072	$ 3,947	15.09%
10	$ 112,359	$ 3,888	$ 129,314	$ 4,474	15.09%
11	$ 6,046	$ 209	$ 6,958	$ 241	15.09%
12	$ 26,079	$ 902	$ 30,015	$ 1,039	15.09%
13	$ 2,406	$ 83	$ 2,769	$ 96	15.09%
14	$ 2,450	$ 85	$ 2,820	$ 98	15.09%
TOTAL	$ 18,695,427	$ 646,862	$ 21,516,476	$ 744,470	15.09%

Figure VI

Non Irrigated Farmland
Summer Fallow Basis (F)
2003 Reappraisal Cycle Phase-in Values

GRADE	Bu. Wheat Per Acre Summer Fallow	2003 Assessed Value/AC	2004 Assessed Value/AC	2005 Assessed Value/AC	2006 Assessed Value/AC	2007 Assessed Value/AC	2008 Assessed Value/AC
1a8	40 & over	$317.07	$324.84	$332.62	$340.40	$348.18	$355.96
1a7	38 - 39	$301.41	$308.80	$316.20	$323.59	$330.98	$338.38
1a6	36 - 37	$285.75	$292.76	$299.77	$306.78	$313.79	$320.80
1a5	34 - 35	$270.09	$276.72	$283.34	$289.97	$296.60	$303.22
1a4	32 - 33	$254.44	$260.68	$266.92	$273.16	$279.40	$285.64
1a3	30 - 31	$238.78	$244.64	$250.49	$256.35	$262.21	$268.07
1a2	28 - 29	$223.12	$228.59	$234.07	$239.54	$245.01	$250.49
1a1	26 - 27	$207.46	$212.55	$217.64	$222.73	$227.82	$232.91
1a	24 - 25	$191.81	$196.51	$201.22	$205.92	$210.63	$215.33
1b	22 - 23	$176.15	$180.47	$184.79	$189.11	$193.43	$197.75
2a	20 - 21	$160.49	$164.43	$168.36	$172.30	$176.24	$180.18
2b	18 - 19	$144.83	$148.39	$151.94	$155.49	$159.04	$162.60
2c	16 - 17	$129.17	$132.34	$135.51	$138.68	$141.85	$145.02
3a	14 - 15	$113.52	$116.30	$119.09	$121.87	$124.66	$127.44
3b	12 - 13	$97.86	$100.26	$102.66	$105.06	$107.46	$109.86
4a	10 - 11	$82.20	$84.22	$86.24	$88.25	$90.27	$92.29
4b	8 - 9	$66.54	$68.18	$69.81	$71.44	$73.07	$74.71
5	Under 8	$31.32	$32.08	$32.85	$33.62	$34.39	$35.16

Non Irrigated Farmland
Continuously Cropped Basis (CC)

GRADE	Bu. Wheat Per Acre Per Year	2003 Assessed Value/AC	2004 Assessed Value/AC	2005 Assessed Value/AC	2006 Assessed Value/AC	2007 Assessed Value/AC	2008 Assessed Value/AC
1A4	44 & Over	$696.76	$713.85	$730.95	$748.04	$765.13	$782.23
1A3	42 -43	$665.45	$681.77	$698.10	$714.42	$730.75	$747.07
1A2	40 - 41	$634.13	$649.69	$665.24	$680.80	$696.36	$711.91
1A1	38 - 39	$602.82	$617.60	$632.39	$647.18	$661.97	$676.76
1A	36 - 38	$571.50	$585.52	$599.54	$613.56	$627.58	$641.60
1	34 - 35	$540.19	$553.44	$566.69	$579.94	$593.19	$606.45
2	32 - 33	$508.87	$521.35	$533.84	$546.32	$558.81	$571.29
3	30 - 31	$477.56	$489.27	$500.99	$512.70	$524.42	$536.13
4	28 - 29	$446.24	$457.19	$468.13	$479.08	$490.03	$500.98
5	26 - 27	$414.93	$425.10	$435.28	$445.46	$455.64	$465.82
6	24 - 25	$383.61	$393.02	$402.43	$411.84	$421.25	$430.66
7	22 - 23	$352.29	$360.94	$369.58	$378.22	$386.87	$395.51
8	20 - 21	$320.98	$328.85	$336.73	$344.60	$352.48	$360.35
9	18 - 19	$289.66	$296.77	$303.88	$310.98	$318.09	$325.20
10	16 - 17	$258.35	$264.69	$271.03	$277.36	$283.70	$290.04
11	14 - 15	$227.03	$232.60	$238.17	$243.74	$249.31	$254.88
12	12 - 13	$195.72	$200.52	$205.32	$210.12	$214.93	$219.73
13	10 - 11	$164.40	$168.44	$172.47	$176.50	$180.54	$184.57
14	Less than 10	$78.29	$80.21	$82.13	$84.05	$85.97	$87.89

Continuously Cropped Hay Land

The crop basis for continuously cropped hay land is the alfalfa commodity price. Continuously cropped hay land includes any alfalfa or grass hay that is clipped a majority of the years.

Previous advisory committees felt that the alfalfa commodity price reported to the Montana Agricultural Statistics Service was heavily influenced by the dairy industry. The dairy industry pays a premium price for high quality alfalfa hay so their dairy cattle can sustain high milk production levels. Most ranchers use hay produced on their operation to support their own livestock. The 2002 advisory committee recommended to continue the current practice of reducing alfalfa commodity prices by 20 percent to account for the dairy influence.

The productivity grade H1 represents the highest production range for dryland hay. The production range for productivity grade H1 is 3.0 tons per acre and greater. For the purpose of valuation, the midpoint that represents the productivity range for grade H1 is also 3.0 tons. In every other agricultural sector, the midpoint of the highest production range is higher than the minimum necessary production and is equally spaced from the next lowest productivity grade. Therefore, the committee recommends that the midpoint of grade H1 be changed from 3.0 tons to 3.2 tons. This will mean that grade H1 is treated in the same manner as the highest production grade in the other agricultural sectors. The proportional difference between each midpoint will be 0.5 tons per acre.

The recommended valuation midpoint for each dry land hay productivity grade is as follows.

Grade	1	2	3	4	5	6	7
Tons/Acre	3.0 +	2.50-2.99	2.00-2.49	1.50-1.99	1.00-1.49	0.50-0.90	<0.50
Midpoint	3.20	2.70	2.20	1.70	1.20	0.70	0.20

The increase in alfalfa prices for continuously cropped hay land produces an estimated 14.01 percent increase in valuation for the 2003 reappraisal cycle.

Figure VII shows the 2003 reappraisal impact by productivity grade for continuously cropped hay land.

Figure VIII reflects the per-acre phase-in values for each year of the 2003 reappraisal cycle for continuously cropped hay land.

Figure VII

Assessed & Taxable Value Comparison
1997 Versus 2003
Continuously Cropped Hay land

	Continuously Cropped Hay Land				
	1997 Reappraisal Cycle		2003 Reappraisal Cycle		
PRODUCTIVITY GRADE	TOTAL APPRAISED VALUE	TOTAL TAXABLE VALUE	TOTAL APPRAISED VALUE	TOTAL TAXABLE VALUE	Percent Change
1	$ 343,672	$ 11,891	$ 417,875	$ 14,458	21.59%
2	$ 1,638,237	$ 56,683	$ 1,867,458	$ 64,614	13.99%
3	$ 10,482,601	$ 362,698	$ 11,949,318	$ 413,446	13.99%
4	$ 43,717,573	$ 1,512,628	$ 49,834,502	$ 1,724,274	13.99%
5	$ 91,218,720	$ 3,156,168	$ 103,981,971	$ 3,597,776	13.99%
6	$ 42,272,384	$ 1,462,624	$ 48,187,102	$ 1,667,274	13.99%
7	$ 3,204,373	$ 110,871	$ 3,652,726	$ 126,384	13.99%
Total	$ 192,877,559.85	$ 6,673,563.57	$ 219,890,952.23	$ 7,608,226.95	14.01%

Figure VIII

Non Irrigated Continuously Cropped Hay Land (H)
2003 Reappraisal Cycle Phase-in Values

GRADE	Tons of Hay Per Acre	2003 Assessed Value/AC	2004 Assessed Value/AC	2005 Assessed Value/AC	2006 Assessed Value/AC	2007 Assessed Value/AC	2008 Assessed Value/AC
1	> 3.0	$661.17	$684.14	$707.10	$730.07	$753.03	$776.00
2	2.5 - 2.9	$587.78	$601.17	$614.57	$627.96	$641.36	$654.75
3	2.0 - 2.4	$478.93	$489.84	$500.76	$511.67	$522.59	$533.50
4	1.5 - 1.9	$370.08	$378.52	$386.95	$395.38	$403.82	$412.25
5	1.0 - 1.4	$261.23	$267.19	$273.14	$279.09	$285.05	$291.00
6	.5 - .9	$152.39	$155.86	$159.33	$162.80	$166.28	$169.75
7	< .5	$54.42	$55.66	$56.90	$58.14	$59.38	$60.63

Grazing Land

The income basis for grazing land is the lease fee to graze one animal unit for one month (AUM) on private land. For the purpose of valuation, an animal unit is defined as a 1000-pound steer, a cow/calf pair or 4 to 5 adult sheep.

The net operating income for grazing land must be converted from dollars per animal unit month to dollars per acre. This is accomplished by dividing the midpoint of each productivity grade into the grazing net income. For example, the midpoint for grazing grade 3 is 3.25 acres per animal unit (2.8 – 3.7 acres/AU). If the private lease fee is $12.82 per AUM, then the net income is $12.82 less the 25% management fee or $9.62 per AUM. The net income per AUM is converted to net income per acre by dividing $9.62 per AUM by 3.25 acres per AUM (midpoint of G3 grazing) to equal $2.96 per acre.

The increase in lease fees for private grazing produces an estimated 16.02 percent increase in valuation for the 2003 reappraisal cycle.

Figure IX shows the 2003 reappraisal impact by productivity grade for grazing land.

Figure X reflects the per-acre phase-in values for each year of the 2003 reappraisal cycle for grazing land.

The committee endorsed a change to administrative rule 42.20.147 - **Criteria For Agricultural Land Valuation**, that defines agricultural eligibility for landowners who produce and raise livestock. The committee recommended that a landowner whom produces and raises livestock must meet two key agricultural eligibility requirements. They are:

1. The land must produce and the taxpayer must market, not less that $1,500 in annual gross agricultural income.
2. The land's carrying capacity must support not less than 30 animal unit months per year (AUM's/year).

The committee believes that the land must produce the livestock income. A taxpayer that buys livestock and sells the animals in a short time span or feeds the livestock may own land that that is not producing the $1,500 income requirement. Based on current market prices for weaned calves and their average weaned weight, the land requires 30 AUM's of grazing carrying capacity to produce $1,500 in annual gross income. Based on a 10-month grazing period, the land would have to support at least three animal units.

Figure IX

Assessed & Taxable Value Comparison
1997 Versus 2003
Grazing land

	Grazing Land				
	1997 Reappraisal Cycle		2003 Reappraisal Cycle		
PRODUCTIVITY GRADE	TOTAL APPRAISED VALUE	TOTAL TAXABLE VALUE	TOTAL APPRAISED VALUE	TOTAL TAXABLE VALUE	Percent Change
1A2	$ 995,311	$ 34,438	$ 1,154,741	$ 39,954	16.02%
1A1	$ 8,784,082	$ 303,929	$ 10,191,125	$ 352,613	16.02%
1A+	$ 1,535,068	$ 53,113	$ 1,780,956	$ 61,621	16.02%
1A	$ 42,572,914	$ 1,473,023	$ 49,392,286	$ 1,708,973	16.02%
1B	$ 36,722,659	$ 1,270,604	$ 42,604,931	$ 1,474,131	16.02%
2A	$ 61,973,161	$ 2,144,271	$ 71,900,083	$ 2,487,743	16.02%
2B	$ 197,721,182	$ 6,841,153	$ 229,392,358	$ 7,936,976	16.02%
3	$ 540,414,716	$ 18,698,349	$ 626,978,883	$ 21,693,469	16.02%
4	$ 295,059,705	$ 10,209,066	$ 342,322,662	$ 11,844,364	16.02%
5	$ 74,859,134	$ 2,590,126	$ 86,850,144	$ 3,005,015	16.02%
6	$ 6,172,610	$ 213,572	$ 7,161,345	$ 247,783	16.02%
Total	**$ 1,266,810,542**	**$ 43,831,645**	**$ 1,469,729,515**	**$ 50,852,641**	**16.02%**

Figure X

Grazing Land (G)
2003 Reappraisal Cycle Phase-in Values

GRADE	Acres Per Animal Unit	Animal Units Per Acre	2003 Assessed Value/AC	2004 Assessed Value/AC	2005 Assessed Value/AC	2006 Assessed Value/AC	2007 Assessed Value/AC	2008 Assessed Value/AC
1A2	< .30	> 3.33	$664.75	$682.03	$699.32	$716.60	$733.89	$751.17
1A1	.30 - .50	3.32 - 2.00	$332.37	$341.02	$349.66	$358.30	$366.94	$375.59
1A+	.51 - .59	1.96 - 1.69	$241.73	$248.01	$254.30	$260.58	$266.87	$273.15
1A	.60 - 1.0	1.60 - 1.00	$166.19	$170.51	$174.83	$179.15	$183.47	$187.79
1B	1.1 - 1.8	.90 - .55	$91.69	$94.07	$96.46	$98.84	$101.23	$103.61
2A	1.9 - 2.1	.52 - .47	$66.47	$68.20	$69.93	$71.66	$73.39	$75.12
2B	2.2 - 2.7	.45 - .37	$54.26	$55.68	$57.09	$58.50	$59.91	$61.32
3	2.8 - 3.7	.36 - .27	$40.91	$41.97	$43.03	$44.10	$45.16	$46.23
4	3.8 - 5.5	.26 - .18	$28.59	$29.33	$30.08	$30.82	$31.57	$32.31
5	5.6 - 9.9	.17 - .10	$17.15	$17.60	$18.05	$18.49	$18.94	$19.39
6	> 10	< .10	$10.64	$10.91	$11.19	$11.47	$11.74	$12.02

Irrigated Land - Current Practice

Irrigated land has been placed in one of three rotations – minimum, medium and maximum since they were originally created by the State Board of Equalization. These rotation adjustments address valuation differences because climatic conditions allow certain crops to grow in different regions of the state.

The primary crop grown in the minimum rotation is alfalfa. The majority of irrigated land in Montana falls in the minimum rotation. The principal crops grown in the medium rotation are potatoes and sweet beets. The medium rotation lands are scattered throughout the state in valleys that produce potatoes and sweet beets. The principal crops grown in the maximum rotation are vegetables and silage. The maximum rotation lands are located along major river drainages in the state such as the lower Yellowstone, Musselshell and Bighorn Rivers.

Irrigated land schedules created by the State Board of Equalization used crop combinations grown in each rotation to reflect valuation differences between the rotations. Previous advisory committees changed this methodology to use only alfalfa as the base crop. To reflect value differences between crops grown in the different rotations, the committees decreased the commodity price of alfalfa for medium and minimum rotations, rather than using commodity prices for higher-value crops grown in medium and maximum rotations. The alfalfa price is currently reduced by 20 percent for the minimum rotation and 10 percent for the medium rotation. The alfalfa commodity price for maximum rotations is not adjusted.

The alfalfa commodity price is reduced by 20 percent to account for the influence on reporting prices to the Agricultural Statistics Reporting Service by the diary industry. In addition to the ¾ crop share allowance for costs, state statute mandates that irrigated land will receive additional cost allowances for getting the irrigation water from the point of source to the irrigated field.

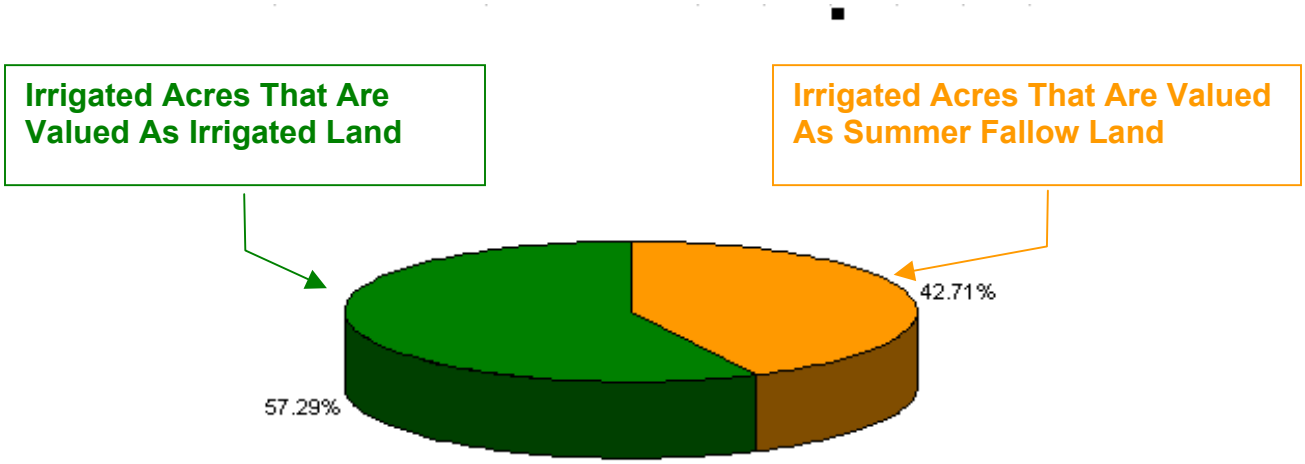
Section **15-7-201(5) MCA** directs the department to use water costs composed of a base cost, labor cost and energy cost. The water base cost stipulated in statute is $5.50 per acre. The labor costs vary with the irrigation type in use on the land. Flood and hand line systems receive a $9.00 labor cost allowance. Tow lines, side roll and lateral sprinklers receive a $5.50 labor cost allowance. Pivot systems do not receive a labor cost allowance.

The energy cost is operator specific and is collected by the department once each appraisal cycle for the energy cost base year. The energy cost base year is defined in **15-7-201(5) MCA** and is year 2001 for the 2003 reappraisal cycle. Each taxpayer with irrigated land was mailed a questionnaire in April 2002, requesting the per-acre energy cost for each irrigation type they used in 2001. Operators that had no energy cost in 2001, principally due to drought, are allowed to use year 2000 energy costs.

State statute mandates that irrigated land cannot be assessed at a value that is lower than it would be if the land were not irrigated. Approximately 43 percent of the irrigated land in Montana was not valued as irrigated land in 2001 (see **Figure XI**). Previous advisory committees have recommended that the alternative minimum values for irrigated land be based on summer fallow farmland.

Figure XI

Irrigated Acreage That Is Valued as Summer Fallow Farmland
2001



Committee Recommendations For 2003 Reappraisal Cycle

Because alfalfa is produced on the majority of irrigated land in Montana, the committee recommended that alfalfa should continue to be used as the base commodity crop for all irrigated lands. The committee also recommended that the landlord's ¼ crop share arrangement for net income remain unchanged and alfalfa commodity prices continue to be reduced by 20 percent to account for the dairy industry influence on reporting prices to the Agricultural Statistics Reporting Service.

The advisory committee recommended that the department eliminate rotations and use one irrigation schedule. Current practice is to use only one base crop. The alfalfa commodity price for minimum and medium rotations is reduced though higher value crops could be grown in areas classified as medium and maximum rotations. This valuation approach is not logical from an appraisal standpoint. The committee recommended that all irrigated land be valued at 100 percent of the base commodity price after the 20 percent reduction for the dairy influence.

The 2001 legislature allowed future advisory committees latitude to recommend changes to the water base cost through the administrative rules process. The 2002 advisory committee chose to exercise this option and recommended an increase in the base cost from $5.50 to $10.00. The $5.50 base cost was set in 1995 and it is the professional opinion of the committee that this cost is too low. Inflation has raised costs since the current approach was developed and all irrigation is labor intensive. A base cost of $5.50 only pays for a little more than ½ hour per acre of labor. In terms of valuation, the increase in the water base cost offsets the elimination of deductions given to the minimum and medium rotations.

The committee recommended a reduction in the number of water cost categories from seven to five. There are several reasons for this decision. Currently, there are no irrigated lands in water cost category 1 because the base cost and labor cost for each irrigation method exceed the limits for this water cost category. In actuality, only six water cost categories are utilized. The recommendation to increase the water base cost has the effect of pushing irrigated land up one water cost category.

The 2001 legislature increased the upper limit for total water costs from $35.00 to $40.00. The change in the total water cost allowance and the increase in the water base cost necessitates a restructuring of the water cost categories. The following tables show the recommended water cost categories and the recommended base cost and labor cost for each irrigation system.

2003 Recommended Water Cost Categories

1					
$0 – $19.99	$20.00 - $24.99	$25.00 - $29.99	$30.00 - $34.99	$35.00 – $40.00

2003 Recommended Water Base Cost And Labor Cost By Irrigation Type

	Flood	Sprinkler	Pivot
Base	$10.00	$10.00	$10.00
Labor	$ 9.00	$ 4.50	$ 0.00
Total	**$19.00**	**$14.50**	**$10.00**

* Flood irrigation systems include: flood and hand lines
* Sprinkler irrigation systems include: Tow lines, side roll and lateral sprinklers

The committee recommended that the department use dryland hay rather than summer fallow farmland as the basis to value land with irrigated values lower than they would be had the land not been irrigated. The basis for this decision is threefold. First, irrigated land is farmed every year versus summer fallow land that is typically farmed every other year. Second, productivity on irrigated land is based on tons of alfalfa per acre while productivity for farmland is based on bushels of wheat. Therefore, the productivity conversion from tons of alfalfa to bushels of wheat requires the use of special conversion tables. Third, the committee believes that land that is removed from irrigation more often reverts to dryland hay, rather than summer fallow farmland.

According to the Agricultural Statistics Reporting Service, dryland hay yields in Montana usually average over 1 ton per acre. However, these yields include hay from CRP, grain hay, and only harvested acres. Therefore, the committee believes a 9/10-ton yield is a more representative average production figure.

The committee recommended that all alternative minimum values for irrigated land be based on 9/10-ton production of dryland hay, rather than a sliding scale of minimum values based on the land's productivity. This change will increase the assessed values for the lowest irrigated productivity grades but decrease the assessed values for the middle to upper productivity grades. The majority of irrigated acres are in the middle to upper productivity range, so the change to a single dryland value for all alternative minimum irrigated values will reduce the total statewide assessed valuation for irrigated land by approximately five percent.

The committee recommended the department eliminate the two lowest irrigated land grades. Those grades are: I-7 (1.0 – 1.4 tons/acre) and I-8 (< 1.0 tons/acre). The committee feels such low yields cannot justify the cost and effort of irrigation. Furthermore, only 11,039 acres are classified in I-8 and only 43,389 acres in I-7. The average dryland hay yield in Montana is more than 1 ton per acre. The committee recommended that the lowest irrigated land grade should be I-6 (< 1.9 tons/acre) with a valuation midpoint of 0.9 tons per acre.

The changes recommended by the committee will reduce the number of potential per-acre irrigated land assessments from 189 in the 1997 reappraisal cycle to 30 potential per-acre irrigated land assessments for the 2003 reappraisal cycle. These recommendations eliminate some of the complexity in irrigated land valuation and improve the department's tax administration.

Predicting reappraisal impacts for irrigated land is very difficult to accomplish before November 2002. The submission of year 2001 energy costs by taxpayers of irrigated land has a significant impact on irrigated land valuation. Taxpayers have until July 1, 2002 to return energy cost questionnaires to the department. Once the questionnaire is received by the department, it must be processed before a statewide analysis can be completed. However, preliminary estimates can be made based on the assumption that every parcel moves up $4.50 in total water cost allowance due to the increase in the base water cost.

The increase in alfalfa prices and the recommended changes for irrigated land valuation produce an estimated 14.32 percent increase in valuation for the 2003 reappraisal cycle. If the committee had recommended the continuation of previous methodology and only updated income and expense data, the irrigated land assessments were estimated to increase 19.44 percent. Irrigated land in the maximum rotation and to a lesser extent, the medium rotation will see smaller increases and possibly decreases due to the conversion to a single irrigation schedule. Even some grades in certain water cost categories for irrigated land in the minimum rotation will see decreased valuation due to the change in minimum alternative values.

Irrigated land that experiences a decrease in valuation will see the entire reduction in the 2003 tax year. Land that experiences an increased assessment will be phased-in until it reaches the full reappraisal value in 2008.

Figure XII provides the estimated statewide assessed valuation for each irrigated grade in the proposed 2003 irrigation schedule and the estimated change in valuation from the 1997 reappraisal cycle to the 2003 reappraisal cycle. The statewide estimate assumes that every irrigated parcel will move forward one water cost category.

Figure XIII provides the estimated statewide assessed valuation for each irrigated grade in 2003 had the advisory committee recommended the continuation of the previous methodology and only updated income and expense data.

The advisory committee recommended that rotations be eliminated for the 2003 reappraisal cycle. However, rotations are used in current irrigation schedules and irrigated parcels from each rotation will not be fully phased into a single schedule until 2008. Therefore, **Figures XIV – XVI** illustrate how each irrigation value for each rotation will be phased-in during the 2003 reappraisal cycle. The per-acre values highlighted in green are 2003 assessed values that are less than the 1997 assessed values. Any 2003 reappraisal value that decreases from that used in the 1997 reappraisal is fully implemented in 2003. Once a phase-down value is fully implemented in 2003, there is no change in the per-acre value from 2004 through 2008.

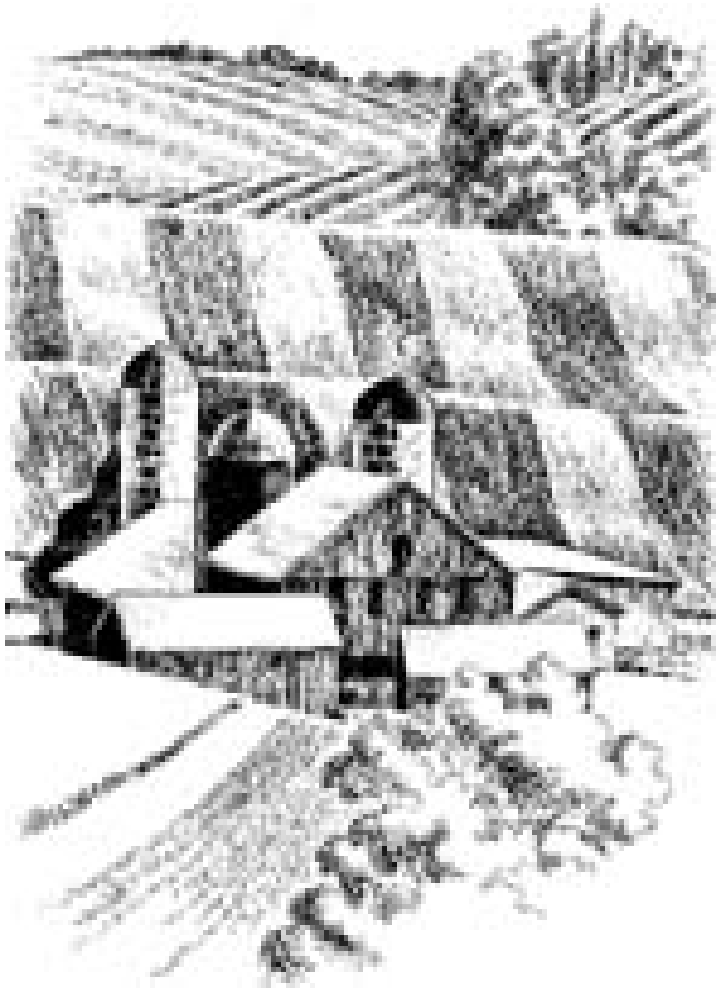


Figure XIV reflects the recommended per-acre phase-in values for each year of the 2003 reappraisal cycle for maximum rotation irrigated land.

Figure XV reflects the recommended per-acre phase-in values for each year of the 2003 reappraisal cycle for medium rotation irrigated land.

Figure XVI reflects the recommended per-acre phase-in values for each year of the 2003 reappraisal cycle for minimum rotation irrigated land.

Figure XII

2003 Recommended Irrigated Land Assessment
Statewide Assessed Values By Productivity Grade

	Water Cost Categories					
Grade	WC1	WC2	WC3	WC4	WC5	TOTAL
1A	$ 12,433,388	$ 4,767,469	$ 3,184,899	$ 975,983	$ 1,074,962	$ 22,436,702
1B	$ 34,376,775	$ 10,276,295	$ 4,298,472	$ 2,453,311	$ 3,046,245	$ 54,451,098
2	$ 46,502,048	$ 11,527,691	$ 6,596,274	$ 4,325,330	$ 4,048,984	$ 73,000,328
3	$ 80,281,554	$ 16,743,537	$ 11,726,155	$ 7,612,936	$ 9,412,858	$ 125,777,039
4	$ 89,572,030	$ 11,780,798	$ 8,919,135	$ 6,939,350	$ 10,623,056	$ 127,834,369
5	$ 70,009,311	$ 12,648,105	$ 10,622,128	$ 5,939,203	$ 7,176,692	$ 106,395,439
6	$ 37,789,736	$ 2,506,613	$ 2,083,743	$ 1,000,920	$ 1,927,522	$ 45,308,535
7	$ 7,429,979	$ 740,769	$ 421,860	$ 315,221	$ 561,905	$ 9,469,735
8	$ 1,903,203	$ 227,784	$ 71,477	$ 114,042	$ 92,647	$ 2,409,152
TOTAL	$ 380,298,024	$ 71,219,060	$ 47,924,144	$ 29,676,298	$ 37,964,871	$ 567,082,397

Change From 1996 Statewide Irrigated Assessment
To 2003 Statewide Irrigated Assessment

Year		% Change
1997	2003	In Value
496,069,509	567,082,397	14.32%

Basis For Estimated Reappraisal Impacts

1997 Irrigated Land Assessment

- assessed values based on three rotations
- summer fallow farmland used as the alternative minimum irrigated value
- $5.50 water base cost
- seven water cost categories
- total water costs capped at $35.00 per acre

2003 Irrigated Land Assessment

- assessed values based on no rotations (single irrigation schedule)
- 9/10 ton dryland hay used as the basis for the alternative minimum irrigated value
- $10.00 water base cost
- five water cost categories
- total water costs capped at $40.00 per acre

Figure XIII

2003 Irrigated Land Assessment
Statewide Assessed Values By Productivity Grade
Values Based On No Change To Valuation Methodology

	Water Cost						
Grade	WC2	WC3	WC4	WC5	WC6	WC7	TOTAL
1A	162,873	13,136,906	5,110,542	3,310,859	914,570	1,063,710	$ 23,699,461
1B	669,123	36,378,906	10,835,895	4,462,581	2,481,365	3,070,161	$ 57,898,031
2	1,497,670	47,688,039	12,089,814	6,750,235	4,464,382	4,787,342	$ 77,277,481
3	4,623,238	76,642,430	17,127,108	12,104,435	9,144,870	13,780,405	$ 133,422,486
4	3,913,918	86,770,894	12,384,150	11,301,011	9,045,859	13,847,790	$ 137,263,621
5	2,967,906	72,627,554	13,515,982	11,290,288	6,312,795	7,628,125	$ 114,342,651
6	908,211	33,443,287	2,262,129	1,880,504	903,295	1,739,520	$ 41,136,948
7	54,747	4,862,789	490,246	279,190	208,616	371,873	$ 6,267,460
8	4,136	950,071	114,204	35,836	57,177	46,450	$ 1,207,875
TOTAL	14,801,822	372,500,876	73,930,070	51,414,941	33,532,929	46,335,377	$ 592,516,014

Estimated Change From 1997 Irrigated Statewide Assessment
To 2003 Irrigated Assessment

Year		% Change
1997	2003	In Value
496,069,509	592,516,014	19.44%

Basis For Estimated Impacts

- alfalfa commodity prices updated using new seven-year Olympic average
- assessed values based on three rotations
- summer fallow farmland used as the alternative minimum irrigated value
- $5.50 water base cost
- seven water cost categories
- total water costs capped at $40.00 per acre

Figure XIV

Irrigated Land (I)
Maximum Rotation
2003 Reappraisal Cycle Phase-in Values

Grade	Water Class	2003 Assessed Value/AC	2004 Assessed Value/AC	2005 Assessed Value/AC	2006 Assessed Value/AC	2007 Assessed Value/AC	2008 Assessed Value/AC
1A	2	$863.19	$863.19	$863.19	$863.19	$863.19	$863.19
1A	3	$814.31	$824.09	$833.86	$843.64	$853.41	$863.19
1A	4	$736.71	$747.01	$757.30	$767.60	$777.89	$788.19
1A	5	$658.58	$668.88	$679.18	$689.47	$699.77	$710.06
1A	6	$580.46	$590.76	$601.05	$611.35	$621.64	$631.94
1A	7	$502.33	$512.63	$522.93	$533.22	$543.52	$553.81
1B	2	$741.94	$741.94	$741.94	$741.94	$741.94	$741.94
1B	3	$705.47	$712.76	$720.05	$727.35	$734.64	$741.94
1B	4	$627.86	$635.68	$643.49	$651.31	$659.12	$666.94
1B	5	$549.74	$557.55	$565.37	$573.18	$581.00	$588.81
1B	6	$471.61	$479.43	$487.24	$495.06	$502.87	$510.69
1B	7	$393.49	$401.30	$409.12	$416.93	$424.75	$432.56
2	2	$620.69	$620.69	$620.69	$620.69	$620.69	$620.69
2	3	$596.62	$601.43	$606.25	$611.06	$615.87	$620.69
2	4	$519.01	$524.35	$529.68	$535.02	$540.35	$545.69
2	5	$440.89	$446.22	$451.56	$456.89	$462.23	$467.56
2	6	$362.76	$368.10	$373.43	$378.77	$384.10	$389.44
2	7	$309.63	$309.96	$310.30	$310.64	$310.98	$311.31
3	2	$439.44	$439.44	$439.44	$439.44	$439.44	$439.44
3	3	$487.77	$490.10	$492.44	$494.77	$497.10	$499.44
3	4	$410.17	$413.02	$415.88	$418.73	$421.58	$424.44
3	5	$332.04	$334.90	$337.75	$340.60	$343.46	$346.31
3	6	$268.19	$268.19	$268.19	$268.19	$268.19	$268.19
3	7	$218.25	$218.25	$218.25	$218.25	$218.25	$218.25
4	2	$378.19	$378.19	$378.19	$378.19	$378.19	$378.19
4	3	$378.19	$378.19	$378.19	$378.19	$378.19	$378.19
4	4	$301.32	$301.69	$302.07	$302.44	$302.81	$303.19
4	5	$225.06	$225.06	$225.06	$225.06	$225.06	$225.06
4	6	$218.25	$218.25	$218.25	$218.25	$218.25	$218.25
4	7	$218.25	$218.25	$218.25	$218.25	$218.25	$218.25
5	2	$256.94	$256.94	$256.94	$256.94	$256.94	$256.94
5	3	$256.94	$256.94	$256.94	$256.94	$256.94	$256.94
5	4	$205.02	$207.66	$210.31	$212.96	$215.60	$218.25
5	5	$205.02	$207.66	$210.31	$212.96	$215.60	$218.25
5	6	$205.02	$207.66	$210.31	$212.96	$215.60	$218.25
5	7	$205.02	$207.66	$210.31	$212.96	$215.60	$218.25
6	2	$218.25	$218.25	$218.25	$218.25	$218.25	$218.25
6	3	$179.57	$187.30	$195.04	$202.78	$210.51	$218.25
6	4	$179.57	$187.30	$195.04	$202.78	$210.51	$218.25
6	5	$179.57	$187.30	$195.04	$202.78	$210.51	$218.25
6	6	$179.57	$187.30	$195.04	$202.78	$210.51	$218.25
6	7	$179.57	$187.30	$195.04	$202.78	$210.51	$218.25

Figure XV

Irrigated Land (I)
Medium Rotation
2003 Reappraisal Cycle Phase-in Values

Grade	Water Class	2003 Assessed Value/AC	2004 Assessed Value/AC	2005 Assessed Value/AC	2006 Assessed Value/AC	2007 Assessed Value/AC	2008 Assessed Value/AC
1A	2	$662.00	$817.33	$828.79	$840.26	$851.72	$863.19
1A	3	$747.27	$770.45	$793.64	$816.82	$840.00	$863.19
1A	4	$676.18	$698.58	$720.98	$743.38	$765.79	$788.19
1A	5	$604.56	$625.66	$646.76	$667.86	$688.96	$710.06
1A	6	$532.95	$552.74	$572.54	$592.34	$612.14	$631.94
1A	7	$461.33	$479.83	$498.32	$516.82	$535.32	$553.81
1B	2	$705.88	$713.09	$720.30	$727.51	$734.73	$741.94
1B	3	$647.29	$666.22	$685.15	$704.08	$723.01	$741.94
1B	4	$576.19	$594.34	$612.49	$630.64	$648.79	$666.94
1B	5	$504.58	$521.42	$538.27	$555.12	$571.97	$588.81
1B	6	$432.96	$448.51	$464.05	$479.60	$495.14	$510.69
1B	7	$361.35	$375.59	$389.83	$404.08	$418.32	$432.56
2	2	$605.90	$608.85	$611.81	$614.77	$617.73	$620.69
2	3	$547.30	$561.98	$576.66	$591.33	$606.01	$620.69
2	4	$476.21	$490.10	$504.00	$517.90	$531.79	$545.69
2	5	$404.59	$417.19	$429.78	$442.37	$454.97	$467.56
2	6	$332.98	$344.27	$355.56	$366.85	$378.15	$389.44
2	7	$309.63	$309.96	$310.30	$310.64	$310.98	$311.31
3	2	$499.44	$499.44	$499.44	$499.44	$499.44	$499.44
3	3	$447.32	$457.74	$468.17	$478.59	$489.01	$499.44
3	4	$376.22	$385.87	$395.51	$405.15	$414.79	$424.44
3	5	$304.61	$312.95	$321.29	$329.63	$337.97	$346.31
3	6	$268.19	$268.19	$268.19	$268.19	$268.19	$268.19
3	7	$218.25	$218.25	$218.25	$218.25	$218.25	$218.25
4	2	$378.19	$378.19	$378.19	$378.19	$378.19	$378.19
4	3	$347.33	$353.50	$359.68	$365.85	$372.02	$378.19
4	4	$276.24	$281.63	$287.02	$292.41	$297.80	$303.19
4	5	$225.06	$225.06	$225.06	$225.06	$225.06	$225.06
4	6	$218.25	$218.25	$218.25	$218.25	$218.25	$218.25
4	7	$218.25	$218.25	$218.25	$218.25	$218.25	$218.25
5	2	$256.94	$256.94	$256.94	$256.94	$256.94	$256.94
5	3	$247.35	$249.27	$251.19	$253.10	$255.02	$256.94
5	4	$205.02	$207.66	$210.31	$212.96	$215.60	$218.25
5	5	$205.02	$207.66	$210.31	$212.96	$215.60	$218.25
5	6	$205.02	$207.66	$210.31	$212.96	$215.60	$218.25
5	7	$205.02	$207.66	$210.31	$212.96	$215.60	$218.25
6	2	$218.25	$218.25	$218.25	$218.25	$218.25	$218.25
6	3	$179.57	$187.30	$195.04	$202.78	$210.51	$218.25
6	4	$179.57	$187.30	$195.04	$202.78	$210.51	$218.25
6	5	$179.57	$187.30	$195.04	$202.78	$210.51	$218.25
6	6	$179.57	$187.30	$195.04	$202.78	$210.51	$218.25
6	7	$179.57	$187.30	$195.04	$202.78	$210.51	$218.25

Figure XVI

Irrigated Land (I)
Minimum Rotation
2003 Reappraisal Cycle Phase-in Values

Grade	Water Class	2003 Assessed Value/AC	2004 Assessed Value/AC	2005 Assessed Value/AC	2006 Assessed Value/AC	2007 Assessed Value/AC	2008 Assessed Value/AC
1A	2	$732.31	$758.48	$784.66	$810.84	$837.01	$863.19
1A	3	$680.22	$716.82	$753.41	$790.00	$826.59	$863.19
1A	4	$615.64	$650.15	$684.66	$719.17	$753.68	$788.19
1A	5	$550.54	$582.44	$614.35	$646.25	$678.16	$710.06
1A	6	$485.43	$514.73	$544.03	$573.34	$602.64	$631.94
1A	7	$420.33	$447.03	$473.72	$500.42	$527.12	$553.81
1B	2	$641.19	$661.34	$681.49	$701.64	$721.79	$741.94
1B	3	$589.10	$619.67	$650.24	$680.80	$711.37	$741.94
1B	4	$524.52	$553.00	$581.49	$609.97	$638.45	$666.94
1B	5	$459.42	$485.30	$511.18	$537.05	$562.93	$588.81
1B	6	$394.31	$417.59	$440.86	$464.14	$487.41	$510.69
1B	7	$329.21	$349.88	$370.55	$391.22	$411.89	$432.56
2	2	$550.07	$564.19	$578.32	$592.44	$606.56	$620.69
2	3	$497.36	$522.53	$547.07	$571.61	$596.15	$620.69
2	4	$433.40	$455.86	$478.32	$500.77	$523.23	$545.69
2	5	$368.30	$388.15	$408.00	$427.86	$447.71	$467.56
2	6	$322.65	$336.01	$349.36	$362.72	$376.08	$389.44
2	7	$309.63	$309.36	$310.30	$310.64	$310.98	$311.31
3	2	$458.35	$467.05	$475.14	$483.24	$491.34	$499.44
3	3	$406.86	$425.38	$443.89	$462.41	$480.92	$499.44
3	4	$342.28	$358.71	$375.14	$391.58	$408.01	$424.44
3	5	$290.00	$301.26	$312.53	$323.79	$335.05	$346.31
3	6	$268.19	$268.19	$268.19	$268.19	$268.19	$268.19
3	7	$218.25	$218.25	$218.25	$218.25	$218.25	$218.25
4	2	$367.83	$369.30	$371.97	$374.04	$376.12	$378.19
4	3	$315.74	$328.23	$340.72	$353.21	$365.70	$378.19
4	4	$257.36	$266.52	$275.69	$284.86	$294.02	$303.19
4	5	$225.06	$225.06	$225.06	$225.06	$225.06	$225.06
4	6	$218.25	$218.25	$218.25	$218.25	$218.25	$218.25
4	7	$218.25	$218.25	$218.25	$218.25	$218.25	$218.25
5	2	$256.34	$256.34	$256.34	$256.34	$256.34	$256.34
5	3	$224.63	$231.09	$237.55	$244.01	$250.48	$256.34
5	4	$205.02	$207.66	$210.31	$212.96	$215.60	$218.25
5	5	$205.02	$207.66	$210.31	$212.96	$215.60	$218.25
5	6	$205.02	$207.66	$210.31	$212.96	$215.60	$218.25
5	7	$205.02	$207.66	$210.31	$212.96	$215.60	$218.25
6	2	$199.35	$203.13	$206.91	$210.69	$214.47	$218.25
6	3	$179.57	$187.30	$195.04	$202.78	$210.51	$218.25
6	4	$179.57	$187.30	$195.04	$156.96	$210.51	$218.25
6	5	$179.57	$187.30	$195.04	$202.78	$210.51	$218.25
6	6	$179.57	$187.30	$195.04	$202.78	$210.51	$218.25
6	7	$179.57	$187.30	$195.04	$202.78	$210.51	$218.25